

Automated Perimeter
Protection Solutions for

BORDER SECURITY

Using Al Deep Learning Geospatial Video Analytics

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AI Enhanced

INTERNATIONAL BORDER PROTECTION

Person: 0.9

Controlling national borders is an important part of a nation's security. The ability to effectively monitor vast areas in varied weather conditions and terrain, while accurately identifying potential threats at great distances is a complicated scenario. The solution calls for knowledgeable personnel and accurate sensors that work together to quickly assess a situation and enable border agents to effectively intervene.

PureActiv® uses geospatial (GIS mapbased) map technology to display camera, radar, and other sensors locations and their field-of-views. alarm events, and target tracks. In addition to live and recorded video and live radar tracks, the user interface includes map tools such as the ability to add and share placemarkers, point-and-click on the map to steer cameras to geolocations, fire laser range finders, range-to-target indicator, and a distance measuring tool. This combination of real-time data on a map-based interface, provides the user a high level of situational awareness, which aides them in effective interdiction.



Why choose PureTech?

- 16 years of field operations,
- Among highest probability of detection,
- Auto-detection to 7.5 miles and classification to 3 miles, depending on sensors,
- Deep Learning resulting in nearzero nuisance alarm rates,
- Live intruder and event locations displayed on GIS map,
- Automatic drone dispatch to alarm locations for birds-eye live view,
- Available for fixed and rapid deploy mobile (truck or trailer) deployments, and
- PTZ lock on target tracking.

PURETECH SYSTEMS PAGE 02

KEY INTEGRATIONS

- TAK/CoT Integration; on-the-move agents can uplink sensor detection tracks,
- Market leading VMS and PSIM systems minimizes IT changes and training,
- Multiple sensor technologies (radar, fiberoptic sensors, etc.) for the most cost-effective detection coverage,
- Loud hailers and spotlight/lighting systems to deter people from perimeters,
- Blue-force tracking (people, land and sea vehicles),
- AIS commercial ship transponders for ship tracking,
- License Plate Recognition Systems, and
- Integrates with new and existing cameras, systems and sensors to minimize deployment costs and extend the lifecycle of current systems.

Diverse Detection Capabilities

- Object left behind,
- Removed Object,
- Tailgating,
- Counting,
- Zone Entry/Exit,
- Stopping,
- Loitering,
- Crowding,
- Walking,
- Running,

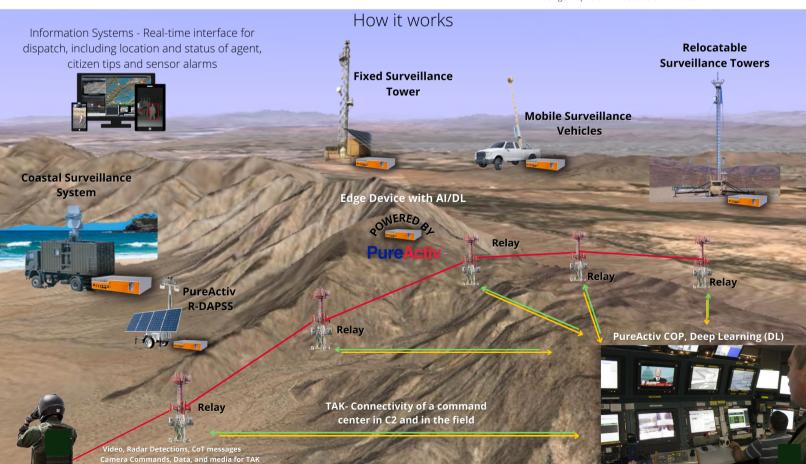
- Unauthorized water vessels in secure water areas,
- Travel Path,
- Perimeter Breach,
- Crawling at short- and long-ranges,
- Persons in unauthorized areas, and
- Wrong direction of travel.

PureActiv drastically reduces nuisance alarms and related operational time and costs.



When tested, PureTech's Geospatial Video Analytics, boosted with its Deep Learning Autoverify, resulted in a 99.5% reduction in nuisance alarms while maintaining a superiorly high probability of detection.

*Real- world example of nuisance alarm elimination using samples of 178 actual alarm videos.



PURETECH SYSTEMS
PAGE 03



PureActiv Rapid-Deploy Autonomous Perimeter Surveillance System (R-DAPSS)

The PureActiv R-DAPSS provides the same best-inclass level of perimeter intrusion detection, autoverification, and automated deterrence as a hard wiredsolution. Security and facility managers can now secure their perimeters quickly without planning and executing a large construction project.

- Autonomous sealed virtual perimeter,
- Enhanced with PureActiv® Al Video Analytics,
- Among highest probability of detection,
- Near-zero nuisance alarms,
- Rapid Installation,
- Scalable to small and large sites,
- Permanent or Relocatable,
- Automatically detects, classifies, geolocates, tracks and alarms only on objects that satisfy threat criteria,
- Less than half the cost and a quarter of the time of hard-wired solutions,
- Optional light and noise deterrents, and
- Eco friendly solar power with backup generator.